A GUIDE
FOR YOUR ENJOYMENT
COLOR DISPLAY MONITOR

MODEL

XC-1440C

For future reference, record the serial number of your display monitor in the space below:

SERIAL No. _____

The serial number is located on the rear cover of the set.

CAUTION

* This set is equipped with a line cord and plug designed for the safety. It is to be used with a properly grounded power receptacle to avoid possible electrical shock.
* Do not remove the back cover of the set as this can expose you to very high voltage and other hazard.

Contents

1. Introduction

2. Installation
   1) Computer power-off
   2) Tilt Stand
   3) Connect the RGB connector to computer
   4) Plug the power code

3. Using
   1) Power-on Indicator
   2) Power ON/OFF Switch
   3) Brightness Control
   4) Contrast Control
   5) V-HEIGHT-H
   6) V-HEIGHT-L

4. Technical Information
   Input Signal
   Timing Chart

5. Care and Maintenance

6. Specifications

1. Introduction

The XC-1440C is 14" (13"V) Medium Resolution Color Display Monitor designed the display characters and graphics. The XC-1440C has many advantages.
These include:

* Fine – Pitch dot matrix
  0.31 mm pitch shadow mask (compared with 0.63 mm TV grade), giving a bright and clear, full 2,000 characters display.
* The CRT, with unique selective light transmission characteristics improving contrast in brightly lit rooms.
* Adjustable 3 – position tilting stand to ensure optimum viewing angle.
* Adjustable picture Brightness and Contrast control volume which you can adjust the Brightness and Colors to suit your request.
* RGB direct drive TTL signal system that provides crisp characters and vivid color graphics.
* High focus provided by the multi – step focus electron gun.

2. Installation

1) Turn your computer power off.

2) Tilt Stand
Depending on your preference, you can adjust the tilt stand to three tilt positions for getting a comfortable viewing positions : 90°, 95°, and 100° angles.

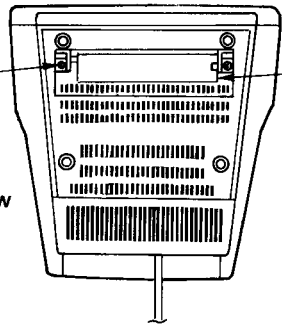


Figure 1. Bottom View

note:
When you install the Tilt and Swivel Stand "XS-0001", the first, 2-screws screw down and next move the Tilt Stand.

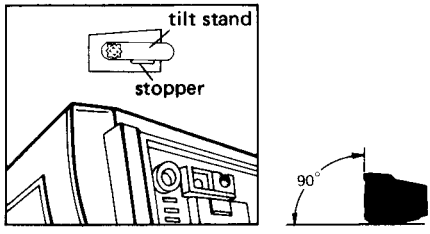


Figure 2. 90° Tilt Stand Adjustment.

When the stand is same level, the set is viewed at a 90° angle.

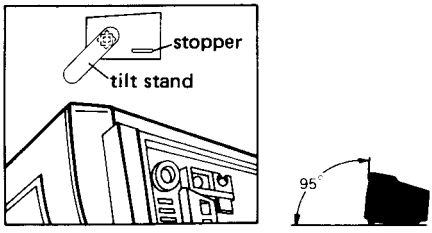


Figure 3. 95° Tilt Stand Adjustment.

For the set to be viewed at a 95° angle, adjust the tilt stand as Figure 3.

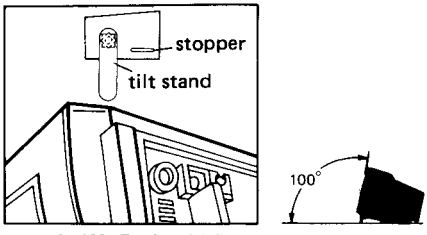


Figure 4. 100° Tilt Stand Adjustment.

For the set to be viewed at a 100° angle, adjust the tilt stand as Figure 4.

3) Connect the RGB Connector to a compatible computer's RGB interface.

4) Plug the power code into a standard AC 220 ~ 240 outlet or approved power strip.

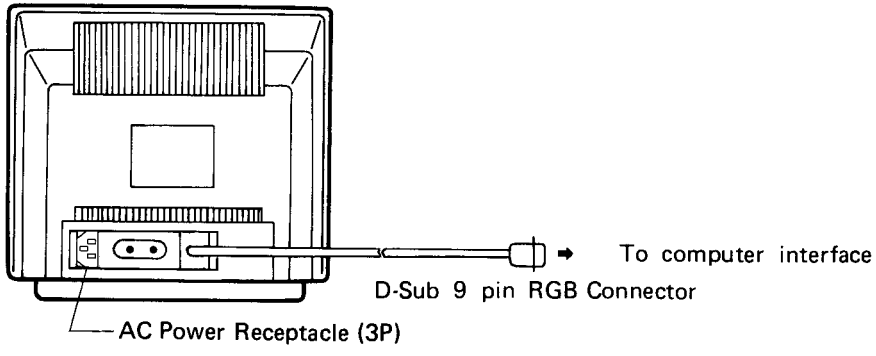


Figure 5. Rear View

Caution: Connect to a properly grounded outlet

Note: • If you have diskette errors while using the set, move the set away from your computer.

• After you have satisfactorily adjusted the tilt stand and connected the set to a compatible computer, connect the set's AC cord to the power source.

3. Using

Power – up all equipment. Use your system operation guide for instructions on powering your computer and other peripherals.

Controls

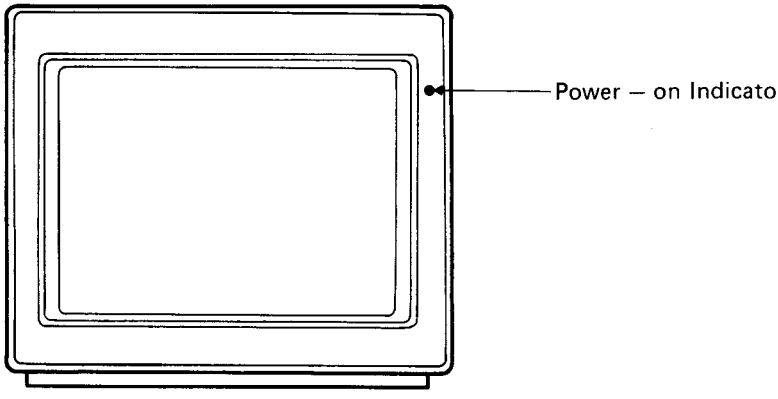


Figure 6. Front View

1) Power-on Indicator

This indicator illuminates when the power is on.

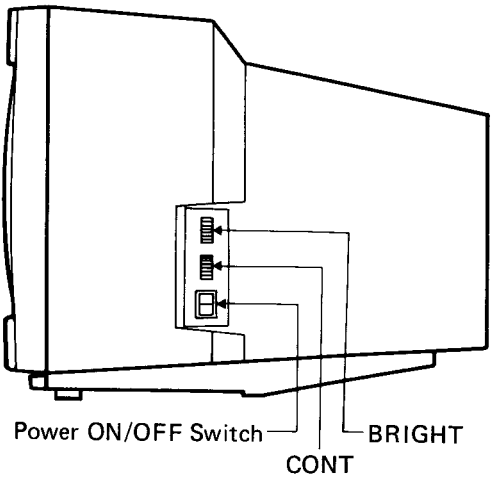


Figure 7. Side View

2) Power ON/OFF Switch

The Power ON/OFF Switch is a seesaw button. Pushed up-side, the power is turned on. Pushed down-side, the power is turned off.

3) BRIGHT (Brightness Control)

The Brightness Control changes the screen brightness. When turned downwards brightness increases.

4) CONT (Contrast Control at f(H) = 15.7 kHz Mode)

The Contrast Control changes the brightness of some colors when you compare them to other colors on the screen. When the Contrast Control is turned downwards some colors get brighter. When the Contrast Control is turned upwards some colors get darker.

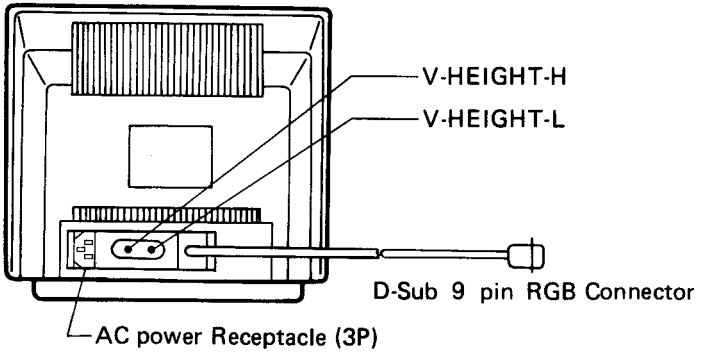


Figure 8. Rear View

5) V-HEIGHT-H

V-HEIGHT-H Control changes the screen size for f(H) = 21.85 kHz.

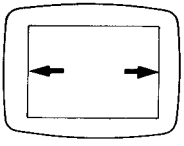
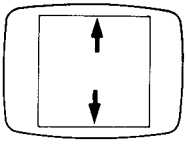
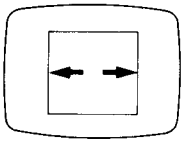
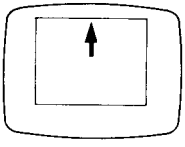
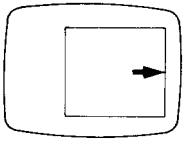
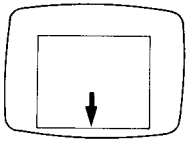
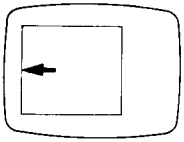
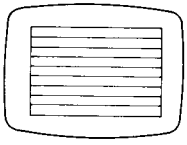
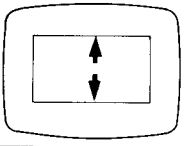
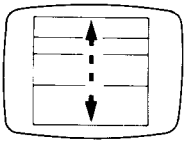
6) V-HEIGHT-L

V-HEIGHT-L Control changes the screen size for f(H) = 15.70 kHz.

4. Technical Information

The XC-1440C is designed only for connection to a compatible computer which output a non-interlaced 350/200 line signal, 21.85/15.70 kHz dual scanning frequency (as detailed next page).
When the set is connected to a non-compatible computer having other than specified output signal, distortion in display image, shape, and position may be due to the inadequate input signal.
The following chart illustrates such conditions. Such conditions are occoured for the connection to a non-compatible computer.

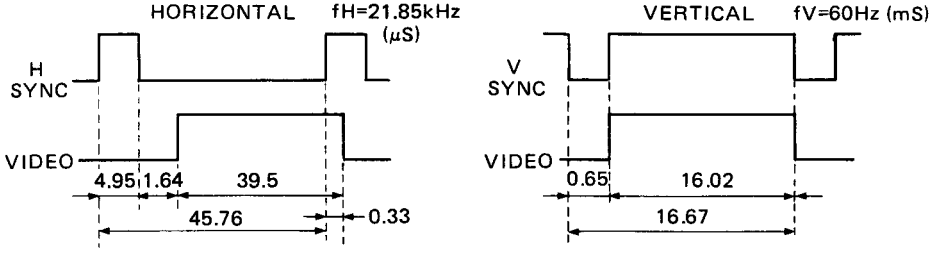
< > shows for f(H) = 15.70 kHz

Symptom	Cause	Symptom	Cause
Display area is spread horizontally. 	Display time is over 39.5 μS. <45.0>	Display area is spread vertically. 	Display time is over 16.02 mS. <12.7>
Display area is too narrow. 	Display time is under 39.5 μS. <45.0>	Display area is positioned toward the top. 	Back porch time is under 0 mS. <2.159>
Display area is positioned too far to the right. 	Front porch time is less than 0 μS. <6.3>	Display area is too far toward bottom. 	Front porch time is under 0 mS. <1.588>
Display area is too far to the left. 	Back porch time is less than 1.64 μS. <7.9>	Picture moves from side to side. 	Horizontal sync. is not within the range of 21.4 ~ 22.2 kHz. <15.3 ~ 16.7>
Display area is reduced vertically. 	Display time is under 16.02 mS. <12.7>	Display area rolls up and down. 	Vertical sync. is not within the range of 57 ~ 63 Hz. <57 ~ 63>

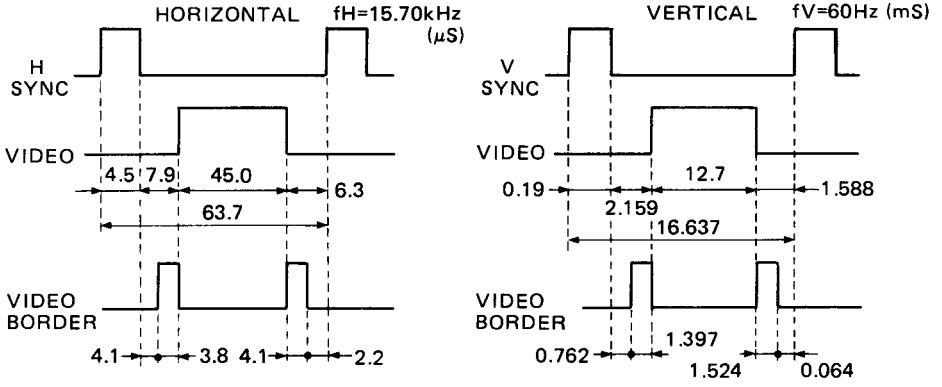
Input Signal

Video Signal	Horizontal Sync.	Vertical Sync.
Primary and secondary RGB Separate TTL Positive	TTL Positive	f(H) = 21.85 kHz : TTL Negative
RGB and Intensity Separate TTL Positive		f(H) = 15.70 kHz : TTL Positive

Timing Chart



Timing Chart



5. Care and Maintenance

Provided the XC-1440C is connected to the proper power source and is handled gently, it should give you a long period of trouble-free productivity. If there is a rare occasion when you suspect a malfunction with the unit, unplug the set and have it checked by your qualified Service Technician under conditions such as:

- If the set has been dropped or the cabinet has been damaged.
- When the power cord is damaged or frayed.
- If the set has been exposed to rain or water.

If you are unable to restore normal operation by following the detailed procedure in your Operation Instructions, do not attempt any further adjustments as improper adjustment of other controls will result in damage and will not often require extensive work by a qualified technician to restore the set to normal operation.
Unplug the set and call your dealer.

If the set fails, or exhibits a distinct change in performance - this indicates a need for service. Unplug the set and have it checked by a professional Service Technician.

It is normal for some sets to make occasional snapping and popping sounds, particularly when being turned on or off. If the snapping or popping is continuous or frequent, unplug the set and consult your dealer.

Installation and Location Hints

The set has slots, openings in the cabinet and back for ventilation purposes, to provide reliable operation of the monitor, and to protect it from overheating.

- Install the set about 4" (0.1 meters) away from the wall.
- Never cover the slots or openings with cloth or other fabric.
- Never block the bottom ventilation slots of the monitor by placing it on a bed, sofa, rug, etc..
- Never place the monitor in a Built-In enclosure, unless proper ventilation is provided.
- Never place the monitor near or over a radiator or heat register.
- Never expose the monitor to rain or excessive moisture and dust as this can be potential cause of fire or shock hazard.
- Never place the monitor on an unstable monitor cart or stand. The monitor may fall causing damage to the monitor or injury. Use only with a cart or stand recommended by the manufacturer.

Operation

- Operate the set only from the power source indicated on the back of the cabinet.
- To use a power source that is not marked on the monitor back will shorten the life of the Monitor and cause damage in addition to improper operation.
- This monitor is equipped with a three-pin plug.
  To ensure safe operation the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively grounded through the normal household wiring. Extension cords used with the equipment must be three-wire and be correctly wired to provide connection to ground. Wrongly wired extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is grounded and that the installation is completely safe. For your safety, if in any doubt about the effective grounding of the power point, consult a qualified electrician.
- Do not overload wall outlets and extension cords as this can result in fire or shock.
- Adjust only those controls that are described in the Owner's Manual. Improper adjustment of other controls may result in possible damage and will require the services of a technician to restore proper operation.
- Do not allow anything to rest on the power cord. Do not locate this monitor where the cord will be abused by persons walking on it.
- When not using the set for extended periods of time, such as a weekend or vacation, unplug the set from the wall outlet.
- If the same characters or graphics are shown for a long time with the Brightness and Contrast controls set to maximum positions, part of the screen may be damaged. Use these controls with care.
- Do not remove the back cover of the set as this can expose you to very high voltage and other hazards.
- Caution children about dropping or pushing objects into the cabinet openings. Some internal parts carry hazardous voltages and contact can result in electrical shock or fire.
- Never operate the set near water–for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc..
- Never spill liquid of any kind on the monitor. If liquid has accidentally spilled into it, unplug the set and have it checked by a Service Technician before use.

Cleaning

- Always unplug the monitor before cleaning.
- Wipe the screen and cabinet front and sides with a soft cloth.
- If the screen requires more than dusting, apply a household window cleaner to a soft cloth to clean the monitor screen.

Caution – Do not use benzene, thinner, or any volatile substances to clean the unit as the finish may be permanently marked. Never leave the unit in contact with rubber or vinyl for an extended period.

- Occasionally, the internal parts of the monitor may need to be cleaned to prevent fire and other damage caused by dust particles. It is recommended that you take the unit to your dealer for yearly cleaning.

6. Specifications

Power Supply	AC 220 ~ 240V 50HZ
Power Consumption	80W
CRT	14"90° deflection, super high contrast and multistep focus tube, fine pitch dot matrix
Input Signal	Primary red, green and blue, secondary red, green (intensity) and blue vertical and horizontal synchronization.
Input Level	Video TTL positive, intensity TTL positive, horizontal synchronization TTL positive, vertical synchronization TTL positive [f(H) = 15.70K] and TTL negative [f(H) = 21.85K]
RGB Connector	D-Sub 9 pin (male) interface cable included.
Scanning Frequency	Horizontal 15.70 kHz / 21.85 kHz Vertical 60 Hz / 60 Hz
Display Time	Horizontal 45.0 μS / 39.5 μS Vertical 12.7 mS / 16.02 mS
Display Size	256 ± 8 mm x 178 ± 5 mm
Resolution	640 dots x 200 lines / 640 dots x 350 lines (within display size) (within display size)
Character Number	Approximately 2000.
Cabinet Dimensions	13 9/10" (W) x 12" (H) x 15" (D) [354mm (W) x 304mm (H) x 380mm (D)]
Weight	Approximately 29.3 lbs. (13.3 kg)